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ABSTRACT

This paper describes the lives and contributions of George Peabody and his nephew Othniel Charles Marsh. Marsh influenced his uncle's gifts to science and science education, particularly in the founding of the Peabody Museum of Archaeology and Ethnology at Harvard, the Peabody Museum of Natural History at Yale, and the Peabody Academy of Science, now the Peabody Essex Museum, at Salem, Massachusetts. The paper deals with the relationship of these two men and the achievements of their lives. George Peabody became one of the most noted educational philanthropists of the 19th-century, founding numerous educational libraries and museums. O. C. (Othniel Charles) Marsh became a Yale professor of paleontology, director of Yale's Peabody Museum of Natural History, president of the National Academy of Sciences (12 years), and a noted researcher prominent in national science affairs. (EH)

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Educational Philanthropist George Peabody (1795-1869) and first U. S. Paleontology Prof. Othniel Charles Marsh (1831-99) at Yale University

By Franklin and Betty J. Parker

Introduction

George Peabody's nephew, Othniel Charles Marsh, influenced his uncle's gifts to science and science education, particularly the founding of the Peabody Museum of Archaeology and Ethnology at Harvard University, founded Oct. 8, 1866; the Peabody Museum of Natural History at Yale University, founded Oct. 22, 1866; and to a lesser extent the Peabody Academy of Science, founded Feb. 26, 1867, now the Peabody Essex Museum, Salem, Mass.

George Peabody's parents, Thomas Peabody (1761-1811) and Judith née Dodge Peabody (1770-1830), lived in Danvers (renamed Peabody, 1868), Mass. George Peabody was the third born and second son of their eight children. His father, a farmer and leather worker, was not successful. After four years of schooling and four years' apprenticeship in a Danvers store, George Peabody, age 16, was assistant in his older brother David's drapery shop in Newburyport, Mass. His father's death (May 13, 1811), with a mortgaged home and other debts, was followed by a Newburyport fire (May 31, 1811). Business prospects being ruined, young Peabody left Newburyport with his maternal uncle John Peabody, also bankrupted by the Newburyport fire, to open a drygoods store in Georgetown, D.C. The management of the store, opened May 15, 1812, fell mainly on George Peabody.

Serving in the War of 1812, young Peabody met fellow soldier Elisha Riggs (1779-1853), an older and more experienced merchant. The 35-year-old Riggs took the 19-year-old Peabody as junior partner in Riggs & Peabody (1814-29), a drygoods importing firm. In 1815 Riggs & Peabody moved from Georgetown to Baltimore, Md. George Peabody became the family supporter, soon restored the Danvers homestead for his mother and siblings living at home, and paid for the schooling of his younger relations. The firm continued as Peabody, Riggs & Co. (1829-45), with George Peabody as senior European purchasing agent. He lived in London from 1837 to his death in 1869, except for three U.S. visits. In London, trading on his own in U.S. state and federal bonds, he formed George Peabody & Co. (185l-64), a banking firm. He took as partner in 1854 Boston merchant Junius Spencer Morgan (1813-90), whose 19-year-old son John Pierpont Morgan (1837-1913), began as New York City agent for George Peabody & Co. George Peabody was thus the root of the international banking firm of Morgan.

Mary Gaines Peabody (1807-34) was Peabody's younger sister whose schooling he paid for at Bradford Academy, Bradford, Mass., during 1822-23. In 1826 at age 19 she fell in love

with 26-year-old Caleb Marsh (1800-?), who taught school near Bradford, Mass. The Peabody and Marsh families had been neighbors in Danvers, Mass., with the Marshes more affluent than the Peabodys. Caleb Marsh, about to marry Mary Gaines Peabody, expected financial help from or work with his future brother-in-law George Peabody. Caleb Marsh wrote to Peabody, busy traveling for Riggs, Peabody & Co., asking help in getting started in the drygoods business. Peabody, aware of pitfalls for beginners, discouraged Caleb Marsh. Caleb Marsh then wrote Peabody asking for a dowry and the conditions for giving it. Peabody provided a monetary settlement, with safeguards. Inept in several enterprises and considered later by the Peabodys "not to be the best of husbands," Caleb Marsh turned to farming in Lockport, N. Y.

Mary Gaines (Peabody) Marsh died of cholera before her 27th birthday after giving birth to her third child, George Marsh (1834-35), who soon also died. She left Caleb Marsh (he later remarried) with two children: a daughter Mary, age five, and a son, Othniel Charles, approaching age three.

O. C. Marsh, called "Othy" as a boy, lived sometimes with aunts and uncles, and with his father and stepmother in Lockport, N.Y., near the recently excavated and fossil-rich Erie Canal. By one account, in 1841 Othy wondered why fossil fish bones were in shale he found so far from water. A local engineer and fossil hunter named Colonel Ezekiel Jewett befriended the boy and explained about fossils, which they unearthed together. Although his father thought he was wasting time, this fossil hunting experience with Jewett sparked Marsh's later passion for paleontology. Otherwise, O. C. Marsh had an erratic schooling and drifted aimlessly until about age 20. Ref. 1.

O. C. Marsh at Phillips Academy and at Yale

The death of his sister Mary Marsh when she was 22 shocked O. C. Marsh into buckling down to hard private study. At age 21, inheriting property from his mother (part of the dowry George Peabody gave to Caleb Marsh), O. C. Marsh enrolled at Phillips Academy, Andover, Mass. His fellow students, in their teens, called Marsh, in his early 20s, "Daddy," and "Captain" (he captained the football team), more in respect than ridicule. He soon became an academic achiever and did some summer fossil hunting. A classmate later recalled that O.C. Marsh made "a clean sweep of all" Phillips Academy honors.

Peabody, in London, pleased by good reports of his nephew O. C. Marsh's academic progress from his sister Judith Dodge (née Peabody) Russell Daniels (1799-1879), helped pay his expenses at Phillips Academy. Learning that young Marsh wanted to attend Yale College, Peabody agreed to pay for his schooling there. Marsh studied geology under Yale Prof. James Dwight Dana (1813-95) and chemistry under Benjamin Silliman, Jr. (1816-85). Marsh was eighth in his graduating class of 109 students at Yale in 1860 (B.A. degree). With Peabody's approval

and support, O. C. Marsh attended Yale's newly opened (1861) graduate Sheffield Scientific School. In two years he earned the M.A. degree in science (1862), at a cost to Peabody, according to science historian Bernard Jaffe, of $2,200. Ref. 2.

George Peabody as Philanthropist

George Peabody early told intimates, and said publicly in 1850, that he would found an educational institution in each town and city where he had lived and worked. By the early 1860s when nephew O. C. Marsh began to influence him toward science, George Peabody had founded Peabody Institute libraries (with lecture halls and funds) in both parts of Danvers, Mass. Danvers was divided north and south in 1852, with the name of South Danvers, his birthplace, changed to Peabody, Mass., April 13, 1868. He had also founded a five-part Peabody Institute of Baltimore, Md. (reference library, lecture hall and fund, conservatory of music, art gallery, and prizes for best Baltimore students). He founded in London in March 1862, just before becoming more involved with nephew O. C. Marsh, the Peabody Donation Fund to build model apartments for London's working poor. His other important philanthropies lay ahead.

O. C. Marsh as Budding Scholar

In 1861 Marsh wrote a scientific paper read at a Geological Society of London meeting, published in its *Transactions*, and reprinted in U.S. and European journals. Ref. 3. His summer vacation field work on fossils in Nova Scotia, Canada, brought praise from Harvard zoology Prof. Louis Agassiz (1807-73), world authority on fossil fishes. Agassiz wrote to Yale Prof. Benjamin Silliman, Jr.: "A student from your Scientific School, Mr. Marsh, has shown me today two vertebrae...which has excited my interest in the highest degree." Ref. 4. Marsh wrote proudly from Georgetown, Mass., to his uncle George Peabody, London, June 9, 1862: "I was so fortunate during one of my vacations as to make a discovery which has already attracted considerable attention among scientific men."

Poor eyesight kept Marsh from serving in the Civil War. In that same June 9, 1862, letter to Peabody he added: "If the plan for completing my studies in Germany, which you once so kindly approved, still meets with your approbation, I should like to go in September next [1862]." Peabody approved and sent Marsh £200 ($1,000). Ref. 5.

Always anxious to please his uncle, Marsh was upset by an article his father sent him from the Lockport *Journal and Courier*, reprinted from a Danvers, Mass., newspaper. He wrote his father that he was "sorry that someone had no more discretion than to preface the notice with some statements which are calculated to do me more injury than...good. The published statement that I am expecting a Professorship at Yale would do not a little towards preventing my getting it. So

also that my expenses at College were paid by Uncle George and that he intended to make me his heir, were certainly very injudicious remarks." Ref. 6.

Marsh sailed for Europe in Oct. 1862. Peabody talked to his nephew in London about his [Peabody's] intended gift to Harvard University. Ref. 7. Marsh described these talks in a letter to his mentor, Yale Prof. Benjamin Silliman, Jr. "I had a long talk with Mr. P. in regard to his future plans and donations.... I will tell you confidentially that Harvard will have her usual good fortune. So many of our family have been educated at Harvard that he naturally felt a greater interest in that institution than in Yale, of which I am the only representative. I can assure you, however, that I did [not] allow the claims of my Alma Mater to be forgotten...and I have strong hopes that she may yet be favored although nothing is as yet definitely arranged. The donation to H. [Harvard] is a large one and for a School of Design.... I did not recommend an endowment for a similar object at Yale, partly because I did not feel so much interest in Art as in Science and partly because Mr. P. manifested so much interest in my scientific studies that I thought it not unlikely that he would be more inclined to that department. I did not propose any definite plan..., as I had then none to propose, but shall hope to do so before long as I do not intend to let the matter rest until something definite is decided upon...." Ref. 8.

Peabody's first gift idea for Harvard in 1861 was an astronomical observatory. He discussed this idea in letters to Francis Peabody of Salem and William Henry Appleton (1814-84) of Boston. Ref. 9. The Harvard gift idea was also discussed with former Harvard Pres. Edward Everett (1794-1865). Everett thought Harvard needed a "School of Design" [i.e., art] more than an observatory. Peabody's Harvard gift idea had thus changed from observatory to a School of Design (art) when he spoke to his nephew O. C. Marsh in London in mid-Oct. 1862. Marsh's enthusiasm about science influenced Peabody, changing again his Harvard gift idea from observatory to art to science, resulting finally in the Peabody Museum of Archaeology and Ethnology at Harvard University, founded Oct. 8, 1866. Ref. 10.

Science at Yale.

O. C. Marsh's letters from Germany evoked special interest among Yale's small band of scientists. By one account Prof. Silliman, Sr., had years before sounded out George Peabody about aiding science at Yale, but nothing came of it. Now, with O. C. Marsh as a budding Yale scholar, his Yale teachers had renewed hope of Peabody aiding science at Yale. Learning that Prof. Silliman, Jr., had worked out with Prof. James Dwight Dana a plan for a possible Peabody Museum at Yale, Marsh wrote on Feb. 16, 1863: "I shall see Mr. P. in the spring or early in the summer, and shall then try to bring the subject before him in a way best suited to ensure its success."

At the University of Berlin, on advice from his Yale mentors, Marsh specialized in vertebrate paleontology. When he met his uncle Peabody in mid-May 1863 in Hamburg, Germany, Marsh was better able to explain to his uncle the need for an endowed museum which would send out expeditions to find ancient animal and human remains and so reconstruct the antecedents and cultural history of man. Marsh told his uncle that Yale's Sheffield Scientific School (founded 1861) had made such a beginning. Ref. 11. He laid out Prof. Benjamin Silliman, Jr.'s, plan for a scientific Peabody museum at Yale. Satisfied that it was a sound idea, Peabody named five trustees: O. C. Marsh, Benjamin Silliman, Sr. and Jr., James Dixon, and James Dwight Dana.

Peabody told Marsh that he would soon add a codicil to his will endowing the Yale museum. Marsh wrote jubilantly from Hamburg to Prof. Silliman, Sr., May 25, 1863: "I take great pleasure in announcing to you that Mr. George Peabody has decided to extend his generosity to Yale College, and will leave a legacy of one hundred thousand dollars to promote the interests of Natural Science in that Institution." Marsh added: "Mr. Peabody suggests that the Trustees...decide upon a plan...best adapted to promote the object proposed, and to embody the main features of this plan in a clause to be inserted in his will." Ref. 12.

Peabody also told Marsh in their May 1863 meeting in Hamburg that although he set the amount to Yale at $100,000, he might raise it and that Yale would receive the gift on his death. As it turned out, Peabody gave the museum gifts to Harvard on Oct. 8, 1866, and to Yale on Oct. 22,1866, during his May 1, 1866, to May 1, 1867, U.S. visit, raising the amounts to $150,000 each.

Prof. Benjamin Silliman, Jr., urged Marsh to collect fossils, books, and scientific papers on paleontology. He explained that doing so would prepare Marsh for a Yale professorship in paleontology and would also make the need for a museum more evident to all. Prof. James Dwight Dana echoed Prof. Silliman, Jr.'s suggestion for Marsh to study further in Germany. Ref. 13.

Unlike the strong U.S. liberal arts tradition, teaching science was new and suspect after Christian fundamentalists denounced the theory of evolution in Charles Darwin's *Origin of Species* (1859). Fundamentalists feared that belief in evolution might supplant belief in divine biblical revelation.

Amidst this conflict between science and religion, Yale's small band of scientists saw hope for their scientific disciplines in Peabody's intended museum gifts to Harvard and Yale, and particularly in the Morrill Act of 1862, which provided federal land grants to the states for science and mechanic arts (engineering) in higher education. The Connecticut legislature in 1863 voted to allocate Morrill Act funds to Yale's Sheffield Scientific School. Prof. Dana remarked, "The fact is

Yale is going to be largely rebuilt, and all at once! The time of her renaissance has come!!" Ref. 14.

In July 1863 Marsh, studying at Heidelberg University, wrote to Peabody: "One...result of your [projected] donation to Yale has been to...realize my highest hopes of a position [there].... The faculty propose to create a new Professorship of Geology and Paleontology.... This Professorship...corresponds to that held by the great Agassiz at Harvard." Marsh explained to his uncle that he needed a library and fossil collection: "Such a library and cabinet...can only be obtained in Europe.... The amount necessary...would be 3 or 4 thousand dollars.... I have felt some hesitation in asking you for this assistance in view of all you have already done for me, but I have thought it much the best way to state the whole case frankly and leave the matter with you." Ref. 15. Peabody wrote Marsh from Scotland in Aug. 1863 that he would give him $3,500 to buy a library and fossil specimens. Ref. 16.

O. C. Marsh's books and fossils

Often ill and wanting to retire, Peabody cut his ties with George Peabody & Co. on Oct. 1, 1864. Without children of his own and aware that he could not control the company business after his death, he asked that his name be withdrawn from the firm. Partner Junius Spencer Morgan (1813-90) urged Peabody to postpone retirement. Peabody wrote J.S. Morgan politely but firmly: "...I can now make no change, for although the continuance of the firm for three or six months, which you suggest, may appear short to you, to me--feeling as I deeply do, the uncertainty of life at the age of seventy--months would appear as years, for I am most anxious before I die to place my worldly affairs in a much more satisfactory state than they are at present." Ref. 17.

Thus was George Peabody & Co., begun informally as early as 1838 and more formally from 1851, succeeded by J. S. Morgan & Co. (1864-1909), by Morgan Grenfell & Co. (1910-1918), Morgan Grenfell & Co. Ltd., since 1918, and has continued since 1989, owned by *Deutsche* Bank, Germany. Ref. 18.

O. C. Marsh wrote Peabody from the University of Breslau Oct. 21, 1864: "I saw in the papers the announcement of your retirement.... Before I retire I should like to do for Science as much as you have done for your fellowmen; and if my health continues I shall try hard to do so." Ref. 19.

Marsh expected his Yale professorship in June 1864, but was disappointed when it was postponed until June 1865. Being already in Germany, he wrote his uncle that he felt he should also study at the University of Breslau (he was the first U.S. student to attend there). Peabody approved and paid his expenses. Ref. 20.

Marsh selected his library of books on geology and paleontology, for which his uncle paid $5,000. Peabody arranged with his agent-friend, Horatio Gates Somerby (1805-72), born in

Newburyport, Mass., and a London-based genealogist, to ship Marsh's effects to the U.S. The books and fossils went through customs two years later weighing 2.5 tons. Marsh's fossils were the basis of the collection of the Peabody Museum of Natural History at Yale. His books formed the basis of its library collection in geology and paleontology. In Berlin Marsh met and spoke with Sir Charles Lyell (1795-1875). In Paris he met and spoke with French geologist Phillippe-Edouard Poulletier De Verneuill. In London, when he was not with his uncle, he spent time at the British Museum with the Keeper of Geology, Henry Woodward. Marsh also talked with such famous British scientists as Thomas Henry Huxley (1825-95) and Charles Darwin (1809-82). Ref. 21.

Back at Yale in March 1866, teaching Prof. Dana's classes in geology, Marsh wrote to his cousin Charles W. Chandler, a lawyer in Zanesville, Ohio, that their uncle George Peabody was about to visit the U.S. (May 1, 1866 to May 1, 1867).

Peabody's Advisor R. C. Winthrop

George Peabody arrived in N. Y. C. on the *Scotia* , May 3, 1866, for his year's U.S. visit (May 1, 1866-May 1, 1867). He conferred on May 9 and frequently thereafter with his philanthropic advisor, Robert Charles Winthrop (1809-94). Winthrop had been highly recommended to Peabody in 1862 in London by Thurlow Weed (1797-1882), the politically powerful N. Y. State editor. Weed was in London in 1862 as Pres. Lincoln's emissary to keep Britain from siding with the Confederacy in the Civil War. Weed pointed out that Winthrop was uniquely qualified to advise and guide Peabody's philanthropy. Ref. 22. Winthrop was the distinguished descendant of first Mass. Bay Colony Gov. John Winthrop (1588-1649), a Harvard graduate (1828), trained in Daniel Webster's law office, a member of the Mass. legislature (1834-39, and its Speaker), member of the U.S. House of Representative (1840-50, its Speaker during 1847-49), was appointed to fill Daniel Webster's U.S. Senate seat (1851), and had given the main addresses at the Washington Monument cornerstone laying (1848) and at its completion (1885). Known and respected by the U.S. political and academic power structure, Winthrop agreed to help plan Peabody's philanthropy after 1866. In 1867 Winthrop helped name the Peabody Education Fund (PEF) trustees, was president of that board, and guided the PEF to his death in 1894.

When Peabody first laid before Winthrop his philanthropic plans (probably on May 9, 1866), Winthrop expressed amazement at its size and scope. Winthrop remembered Peabody's reply and quoted it in his Feb. 8, 1870, eulogy at Peabody's burial. Peabody's words, underlining added below, were later cut into the stone marker placed at the temporary grave site in Westminster Abbey, where Peabody's remains lay in state 30 days (Nov. 11-Dec. 12, 1869). Peabody had replied: "Why, Mr. Winthrop, this is no new idea to me. From the earliest of my manhood I have contemplated some such disposition of my property; and I have prayed my

Heavenly Father, day be day, that I might be enabled before I died, to show my gratitude for the blessings which He has bestowed upon me, by doing some great good for my fellow-men." Ref. 23.

R. C. Winthrop's Help on the Peabody Museum of Harvard

Winthrop had a series of meetings on the Peabody Museum of Harvard: with George Peabody on June 1, 1866, at the Tremont House, Boston; on June 4 with Peabody's nephews, Yale Prof. O. C. Marsh and George Peabody Russell (1834-?, Harvard graduate class of 1856 and a lawyer) at the Massachusetts Historical Society; and on June 17 again with George Peabody, who gave Winthrop permission to consult confidentially with Harvard friends. Winthrop especially sought the advice and approval of Louis Agassiz (1807-73), the leading U. S. scientist and Harvard zoologist. Winthrop also talked to Harvard's former Pres. James Walker (1794-1874, Harvard president during 1853-60). Agassiz, Winthrop, and Walker knew that Harvard officials preferred new gifts of money to go to its library and to its Museum of Comparative Zoology rather than for Peabody's proposed museum. Pres. Walker said to Winthrop: "...When a generous man like Mr. Peabody proposes a great gift, we...had better take what he offers and take it on his terms, and for the object which he evidently has at heart.... There...will be, as you say, disappointments in some quarters. But the branch of Science, to which this endowment is devoted, is one to which many minds in Europe are now eagerly turning.... This Museum...will be the first of its kind in our country."

Winthrop communicated his conversation with Pres. Walker to Peabody on July 6, 1866. On Sept. 24, 1866, Winthrop again met with George Peabody and his nephews, Prof. O. C. Marsh and G. P. Russell. On Sept. 28, 1866, Winthrop called the first meeting of the trustees of the Peabody Museum of Archaeology and Ethnology at Harvard. The trustees accepted Peabody's gift of $150,000. His founding letter of Oct. 8, 1866, ended with these suggestions: "...In view of the gradual obliteration or destruction of the works and remains of the ancient races of this continent, the labor of exploration and collection be commenced at as early...as practicable; and also, that, in the event of the discovery in America of human remains or implements of an earlier geological period than the present, especial attention be given to their study, and their comparison with those found in other countries." Ref. 24.

Anthropology at Harvard University

Thus, O.C. Marsh, a Yale man, influenced the founding of the first U. S. museum of anthropology in the U. S. at Harvard University. It was endowed by Peabody nine years after the discovery in 1857 in Prussia of the Neanderthal skull, which renewed interest in man's origins. Ethnological items, long collected but unexamined, were soon donated to the new Peabody

Museum at Harvard by New England societies, including the Massachusetts Historical Society. When the Massachusetts Historical Society's ethnological items were transferred to the Peabody Museum at Harvard, former Harvard Pres. James Walker said, "For a long time Harvard has exhausted her resources on the traditional liberal arts. The time has come for her to advance scientific knowledge. Mr. Peabody shows great wisdom in facilitating cooperation between the Massachusetts Historical Society and his Museum at Harvard through trustees of the latter who are prominent members of the former." Ref. 25.

Science historians Charles Franklin Thwing (1853-1937) and Ernest Ingersoll (1852-1946) each wrote that the Peabody Museum at Harvard University began the systematic study of anthropology in U. S. higher education. Pre-Columbian life in North America was largely unexplored; existing collections were slight and fragmentary. Ref. 26.

Many early prominent scientists were officers of the Peabody Museum of Harvard, including Frederic Ward Putnam (1839-1915). He was its curator during 1874-1909 and enhanced its reputation as well as his own. He was called by his peers the "Father of American Anthropology." While at the Peabody Museum of Harvard, he also found time 1-to help found the Anthropology Department of the American Museum of Natural History, N.Y.C., during 1894-1903; and 2-the Department and Museum of Anthropology, University of California, during 1903-09; and 3-to be secretary of the American Association for the Advancement of Science, during 1873-98. Famed anthropologist Prof. Franz Boas (1858-1942) wrote that F. W. Putnam pursued the subject of early man in North America with "unconquerable tenacity." Putnam wrote over 400 anthropological reports, many of them on the culture of the "mound builders," ancient ancestors of the American Indians. Ref. 27. At its centennial in 1967, Peabody Museum of Harvard Director John O. Brew (1906-88) stated that its personnel had pioneered in studying the unique Mayan culture in Central America and had led a total of 688 expeditions worldwide to study early human life. Ref. 28.

O. C. Marsh's influence at Yale

O.C. Marsh was a convinced evolutionist when in the early 1860s he visited Charles Darwin at his country home in England. Twenty years later Charles Darwin wrote to Marsh, crediting him with finding fossils that provided the best evidence to prove the theory of evolution. Marsh also published fossil proof of the North American origin of the horse. Previously scientists believed that the horse originated in Europe and was brought to America with Christopher Columbus and the conquistadors. Darwin's strongest defender, Thomas Henry Huxley (1825-95), visiting Marsh at Yale in 1876, was so convinced by Marsh's horse fossil findings that he changed the content of his U. S. lectures, citing Marsh's proof of the pre-Columbian origin of the horse in North America. Ref. 29.

As Yale Prof. of Paleontology and Director of Yale's Peabody Museum of Natural History, Marsh did not teach or receive a salary until his last years, when his private income (left to him by Peabody) was almost gone. He was an astute organizer of Yale assistants, directing their field work by telegraph and letter, overseeing their collecting and shipping railroad carloads of fossils. At Yale he assembled entire dinosaurs, toothed birds, and other extinct mammals. His enormous collection at Yale was still being catalogued in the 1990s. He made his major dinosaur fossil finds in the mid 1870s-80s in the Rocky Mountain region; at Comma Bluff in eastern Wyoming; Canyon City, Colorado; and elsewhere in the rugged U. S. West. He used Yale's Peabody Museum of Natural History resources, student assistants, and federal funds in his capacity as U.S. Geological Survey paleontologist (1882-92) and honorary curator of vertebrate paleontology at the U.S. National Museum (1887) to find over 1,000 new fossil vertebrates, many of which he classified and described. Ref. 30.

Marsh lived like a Victorian gentleman in his 18-room New Haven, Conn., brownstone, courting and entertaining lavishly U.S. and foreign scientists and politicians. For 12 years he was president of the National Academy of Sciences, the most prestigious U.S. scientific body. He was prominent in national science affairs and wielded influence in government and academic science circles. Some peers and at least one assistant, Samuel Wendell Williston (1852-1918), who achieved scientific renown after leaving O. C. Marsh's employ, criticized him for publishing fossil findings of his assistants as his own. Marsh's last years were marred by lack of money and loss of U.S. government support. Ref. 31.

O. C. Marsh-E. D. Cope rivalry

Marsh's chief scientific rival was Philadelphia-born and independently wealthy paleontologist Edward Drinker Cope (1840-97). Cope was the son of a wealthy Quaker ship owner and philanthropist. Like Marsh, Cope's mother died when he was three-years-old. Unlike Marsh, Cope grew up in a well-ordered household, did well in a Quaker school, and published his first scientific paper at age 18. Marsh did little until age 20 and published his first paper at age 30. Both studied science in Europe. Cope, with his wife and daughter, lived in Haddonfield, N.J. When his father died (1875), Cope at age 35 inherited a fortune which he used to finance his fossil finds. Cope lived simply. In contrast, Marsh, a bachelor, lived the life of a Victorian gentleman. On frequent trips to N. Y .C. Marsh was often seen in fashionable clubs.

Marsh and Cope met in Berlin in 1862. They met again for a friendly week in the U. S. in 1868. From then on, they competed in a quarter-century race in the rugged West to find and identify new mammal fossils in scientific publications. Cope, of brilliant mind and wider natural history interests than Marsh, had no institutional connections until, financially depleted in his last years, he became a University of Pennsylvania professor. Marsh had the knack of management

and made the most of academic and federal government connections. From this rivalry came a treasure trove of dinosaur fossil findings, 80 new kinds of dinosaurs found and described in publications by Marsh and 56 found and described in publications by Cope. From this rivalry came much of what is now known about dinosaurs. Dinosaur displays attracted visitors, particularly young visitors, made science museums popular, and furthered science education. Ref. 32.

Marsh's biographers estimate that Peabody gave Yale directly and indirectly through bequests to Marsh close to half a million dollars. The Peabody Museums at Harvard and Yale, their collections, field exploration, exhibits, famous murals (particularly at the Yale Museum), and education programs are eminently the achievements of their directors and staffs. Yet Peabody's gifts to science education, influenced by nephew O. C. March, made these achievements possible.

George Peabody's Philanthropy

Seven Peabody Institute Libraries, each with free circulating library (except in Baltimore) and lecture halls and lecture funds. Their location, year founded, and total funds are: 1-[now named] Peabody, Mass., 1852, total $217,600. 2-Baltimore, 1857, total $1.4 million (noncirculating special reference library for researchers, lecture hall and fund, music conservatory, art gallery, and annual prizes for best Baltimore students). 3-Danvers, Mass., 1856, $100,000. 4-Georgetown, Mass., 1868, $30,000. 5-Newburyport, Mass., 1866, $15,000. 6-Thetford, Vt., 1866, $10,000. 7-Georgetown, D.C., 1867, $15,000, now part of Washington, D.C., public library. (Peabody's earliest library gift was to the Baltimore Athenaeum and Library, 1845, $500). Library gifts totaled $1,788,100.

Seven gifts to science and science education: 1-Chemistry laboratory and chemistry school, Maryland Institute, Baltimore, 1851, $1,000. 2-Peabody Museum of Archaeology and Ethnology, Harvard University, 1866, $150,000. 3-Peabody Museum of Natural History, Yale University, 1866, $150,000. 4-Mathematics and natural science professorship, Phillips Academy, Andover, Mass., 1866, $25,000. 5-Mathematics and civil engineering professorship, Kenyon College, Gambier, Ohio, 1866, $25,000. 6-[now named] Peabody Essex Museum, Salem, Mass., 1867, $140,000 (maritime museum and Essex County historical documents). 7-Mathematics professorship, Washington and Lee University, Lexington, Va. (given to then Pres. Robert E. Lee), 1869, $60,000. Science and science education gifts totaled $551,000.

Four publication funds to historical societies: 1-Historical Society of Philadelphia, 1857, $20. 2-Maryland Historical Society, 1866, $20,000. 3-Massachusetts Historical Society, 1866, $20,000. 4-Abstracting Maryland colonial records from English depositories for the Maryland Historical Society, about 1850, amount not known. Publication fund gifts totaled $40,020.

Model housing for London's working poor, 1862-69, $2.5 million (27,000 Londoners still live in 14,000 Peabody homes in 83 housing areas). London housing gift totaled $2,500,000.

First U.S. Arctic expedition, $10,000 for scientific equipment, Second U.S. Grinnell Expedition, 1852-54, in search for missing British explorer Sir John Franklin (1786-1847), led by U.S. Naval Commander Elisha Kent Kane (1820-57). U.S. Arctic expedition gift totaled $10,000.

Patriotic causes: 1-Battle of Lexington Monument, [now named] Peabody, Mass., 1835, $300. 2-Revolutionary War Monument for General Gideon Foster, 1845, $50. 3-Bunker Hill Memorial Monument, 1845, $500. 4-State of Maryland (Peabody declined $60,000 commission due him for selling Chesapeake and Ohio Canal part of Md.'s $8 million bonds for internal improvements, 1837-48). 5-Washington Monument, Washington, D.C., 1854, $1,000. 6-U.S. Sanitary Commission (Civil War medical care and relief for Union soldiers, sailors, and families), 1864, $10,000. Patriotic gifts totaled $71,850.

Hospitals: 1-City of London Hospital for Diseases of the Chest, 1850-55, $165. 2-Mental Hospital, London, 1864, $100. 3-Vatican's San Spirito Charity Hospital, Rome, Italy, 1867, $19,300. Hospital gifts totaled $19,565.

Churches and other charity: 1-South Congregational Church [now named] Peabody, Mass., 1843 or '44, $250. 2-London Refuge for the Destitute, 1858-60, $115. 3-Church, Barnstead, N.H., 1866, $450. 4-Memorial Church (in his mother's hometown), Georgetown, Mass., 1866, $70,000. 5-Robert E. Lee's Episcopal Church, Lexington, Va., Aug. 1869, $100. English Charity, $15. Churches and charity gifts totaled $70,930.

Education: 1-Best scholars' medals, Peabody High School [now Peabody], Mass., 1854-67, $2,600. 2-Best scholars' medals, Holton High School, Danvers, Mass., 1867, $2,000. 3-London school, 1864, $100. 4-Peabody Education Fund (PEF), 11 former Confederate states plus W. Va., 1867-69, $2 million (GP actually gave the PEF trustees $3,484,000 in securities, but Miss. did not honor its $1.1 million bonds or Fla. its $384.00 bonds; so that PEF funds are usually given as $2 million. Education gifts totaled, $2,004,700. George Peabody's known philanthropic gifts totaled $7,056,165.

Last Will

George Peabody's last will, Sept. 9, 1869, left to former clerks at George Peabody & Co., London, $11,000 to Henry West, and $5,000 to Thomas Perman. $25,000 each to his two British estate executors, Sir Curtis Miranda Lampson (1806-85) and Sir Charles Reed (1819-81). $5,000 each to his three U. S. estate executors, nephews George Peabody Russell (1834-?) and Robert Singleton Peabody (1837-1904) and nephew-in-law Charles W. Chandler. To the Family Trust

Fund (one brother, one sister, and fourteen nieces and nephews), he left (variously estimated) $1.5 million to $4 million.

Philanthropic Influence

George Peabody's philanthropy directly influenced 1-Johns Hopkins' (1795-1873) $8 million bequest for the Johns Hopkins University, Hospital, and Medical School, Baltimore. He indirectly influenced 2-Enoch Pratt (1808-96), who served as Peabody Institute of Baltimore trustee and treasurer, to found the Enoch Pratt Free Library, Baltimore's public library. He indirectly influenced PEF trustees 3-Anthony Joseph Drexel (1826-93) to found Drexel University, Philadelphia, 1891; and 4-Paul Tulane (1801-87) to found Tulane University, New Orleans, 1884; and indirectly influenced 5-Alexander Turney Stewart (1803-76) to build his planned Garden City, N.Y., community on the plan of the Peabody Homes of London.

Honors in life

George Peabody was the 1-first American to receive the Freedom of the City of London, July 10, 1862 (also given to General Dwight D. Eisenhower in 1945). He was granted honorary memberships in the ancient guilds of the 2-Clothworkers' Company of London, July 2, 1862; and the 3-Fishmongers' Company of London, April 19, 1866. 4-Queen Victoria sent him a letter of thanks and her miniature portrait (estimated cost, $70,000), delivered by the British ambassador to Peabody, then in the U.S., March 1867. 5-He had private audiences with Pope Pius IX and with French Emperor Napoleon III and Empress Eugénie, in 1868. 5-Sculptor William Wetmore Story's seated GP statue was erected near the Royal Exchange, Threadneedle Street, London, paid for by popular subscription, and unveiled by the Prince of Wales, July 23, 1869 (a replica was erected in front of the Peabody Institute of Baltimore, 1890. London has monuments to only three Americans: George Peabody, Abraham Lincoln, Franklin Delano Roosevelt). 6-U.S. Congress unanimously passed a resolution of praise and awarded a gold medal to George Peabody, March 1867, in national appreciation for the 1867 Peabody Education Fund. 7-His birthplace, South Danvers, Mass., was renamed Peabody, Mass., April 13, 1868. 8-He was granted an honorary Doctor of Law degree, Harvard University, July 17, 1867 (for the Peabody Museum of Harvard University); and an honorary Doctor of Civil Law degree, Oxford University, June 26, 1867. 9-George Peabody was considered but declined appointment as U.S. Treasury Secretary in President Andrew Johnson's Cabinet, Feb. 1867.

Honors after death

10-A funeral service (Nov. 5) was held in Westminster Abbey, London, and marker designates his temporary burial there, Nov. 5-Dec. 11, 1869. 11-Prime Minister W. E. Gladstone's cabinet decided on Nov. 10, 1869, to return Peabody's remains to the U.S. aboard

HMS *Monarch*, then Britain's newest, largest warship. 12-Pres. U.S. Grant ordered the USS *Plymouth* from Marseilles, France, to accompany the *Monarch*, to the U. S. 13-Pres. Grant ordered Admiral David Farragut to command a U. S. naval reception in Portland harbor, Maine. 14-Lying-in-state honors were held in Portland, Maine, and in Peabody, Mass. 15-Final burial was in Harmony Grove Cemetery, Salem, Mass., February 8, 1870, attended by Queen Victoria's third son, Prince Arthur, then on a Canadian tour. 16-GP was elected to the New York University Hall of Fame, 1900, with a bust by sculptor Hans Schuler unveiled, May 12, 1926. 17-Virginia and South Carolina legislators proposed (unsuccessfully) a George Peabody statue in Statuary Hall, U. S. Capitol, 1896. 18-Artist Louis Amateis designed (1904-08) two bronze doors for the west entrance, U. S. Capitol Building, with transom panel tableau called "Apotheosis of America," symbolizing U. S. intellectual development, featuring images of Thomas Jefferson, Benjamin Franklin, Ralph Waldo Emerson, George Peabody, Johns Hopkins, and Horace Mann. 19-Tennesseans in 1941 proposed, unsuccessfully, a commemorative George Peabody U. S. postage stamp (a similar unsuccessful proposal was made in 1993 by Massachusetts citizens for a commemorative George Peabody U. S. postage stamp for the bicentennial of his birth in 1995). 20-An international George Peabody traveling exhibit was organized for the bicentennial of his birth by the Peabody Institute of Baltimore, shown at the Peabody Trust in London, February 18, 1995, and shown at U. S. Peabody institutions through 1995-96. Ref. 33.

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